

CELANEX® 2302 GV1/45

CELANEX® PBT

Celanex 2302 GV1/45 is a 45% glass fiber reinforced Polybutylene terephthalate polymer blend with PET, which provides excellent stiffness and good surface appearance.

Product information

Resin Identification	(PBT+PET)-GF4 5	ISO 1043
Part Marking Code	>(PBT+PET)-GF45<	ISO 11469

Rheological properties

Melt volume-flow rate	7 cm ³ /10min	ISO 1133
Temperature	265 °C	
Load	2.16 kg	
Moulding shrinkage range, parallel	0.1 - 0.2 %	ISO 294-4, 2577
Moulding shrinkage range, normal	0.3 - 0.7 %	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	16000 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	170 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.8 %	ISO 527-1/-2
Charpy notched impact strength, 23 °C	10.5 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30 °C	10.5 kJ/m ²	ISO 179/1eA
Ball indentation hardness, H 961/30	240 MPa	ISO 2039-1
Poisson's ratio	0.33 ^[C]	

[C]: Calculated

Thermal properties

Temperature of deflection under load, 1.8 MPa	205 °C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	15 E-6/K	ISO 11359-1/-2

Flammability

Burning Behav. at thickness h	HB class	IEC 60695-11-10
Thickness tested	0.8 mm	IEC 60695-11-10

Physical/Other properties

Humidity absorption, 2mm	0.15 %	Sim. to ISO 62
Water absorption, 2mm	0.4 %	Sim. to ISO 62
Density	1680 kg/m ³	ISO 1183

Injection

Drying Recommended	yes
Drying Temperature	120 °C
Drying Time, Dehumidified Dryer	4 h
Processing Moisture Content	≤0.02 %
Melt Temperature Optimum	265 °C
Min. melt temperature	255 °C
Max. melt temperature	275 °C

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Screw tangential speed	0.1 - 0.3 m/s
Mold Temperature Optimum	100 °C
Min. mould temperature	90 °C
Max. mould temperature	130 °C
Back pressure	3 MPa

Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Additives	Release agent
Special characteristics	Heat stabilised or stable to heat, High Gloss

Automotive

OEM
General Motors

ADDITIONAL INFORMATION

Jet Black; Special Parts Approval - see your
CE Account Representative for further details.